

Appl. No. 10/622,668
Submission for RCE/Reply to Office Action of July 2, 2008

Attorney Docket No. FSF-031391

REMARKS

Claims 1, 5, 7, 9, 11, 13 to 19 are pending in the present application. By the present amendment, claims 1 and 17 have been amended.

One of the amendments to claims 1 and 17 clarifies that the reducing agents for thermal development are a reducing agent which does not form a dye during thermal development and a reducing agent which forms a dye during thermal development, and the total amount of the reducing agents is from 0.2 to 1.5 g/m². These amendments are supported by the description on page 17, bottom to page 18, line 2 of the originally filed specification.

One of the amendments to claims 1 and 17 changes R₁₁, R₁₂, R₂₁ and R₂₂ from “a secondary or tertiary alkyl group” to “a secondary or tertiary alkyl group having 3 or 4 carbon atoms” respectively. These amendments are supported by the description on pages 9, lines 11 to 14 and page 14, lines 9 to 11 of the originally filed specification.

Thus, the amended claims are commensurate in scope with the results of the 1.132 declaration filed on April 9, 2008.

Rejections under 35 USC 103(a)

Claims 1, 5, 7, 9, 11, 13 to 19 are rejected under 35 USC 103(a) as being obvious over EP 1096310 (EP'310). Claim 7 is rejected under 35 USC 103(a) as being obvious over EP'310 in further view of Oya (US 2001/0051319).

On April 9, 2008, a Declaration under 37 CFR 1.132 was submitted along with a response. In the July 2, 2008 Office Action, the examiner listed various reasons why the declaration failed to overcome the prior art rejections. Submitted herewith is an additional Declaration under 37 CFR 1.132. The content of the new Declaration is aimed at demonstrating why it was improper for the examiner to summarily dismiss the experimental evidence presented in the 1.132 Declaration filed April 9, 2008.

1. Explanation of results

The Declaration submitted herewith summarizes the experimental methodology and results of the previously submitted Declaration. The new

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Declaration clarifies that in the past, color tone has been able to be controlled only in the M-G direction by adjusting the size of the developed silver. In contrast, it is found in the present invention that color tone can be unexpectedly controlled in the Y-B direction by a combination of at least one reducing agent which does not form a dye during thermal development and is represented by formula R1 (a R1 compound) and at least one reducing agent which forms a dye during thermal development and is represented by formula R2 (a R2 compound) and which has reducing activity higher by 0.02 or more in terms of logarithmic value (-LogE) of an exposing amount E giving the concentration 1.5 than that of the R1 compound, with the proviso that the R2 compound is contained in an amount of 5% to 40% by mole to a total amount of the R1 compound and the R2 compound according to the present invention.

In other words, it is ordinarily known that image color tone is controlled by adjusting a silver color tone (color of developed silver). In contrast, the present inventor has found that the R2 compound assumes a yellow color upon oxidation reaction of the R2 compounds per se whereas the R1 compound forms no dye product, and that the image color tone can be controlled by using a combination of the R1 compound and the R2 compound, with the proviso that the R2 compound is contained in an amount of 5% to 40% by mole to a total amount of the R1 compound and the R2 compound, thereby forming a desirable amount of yellow dye (pages 7 and 18 of the present application, and Declaration submitted on April 9, 2008).

2. Organoleptic evaluation based on visual inspection

In Office Action dated July 2, 2008, the examiner has stated that:

“the organoleptic evaluation is based on naked eyes, and it is improper to use this type of evaluation to conclude that the results would have been unexpected by the worker of ordinary skill in the art since the vision may change from one people to another.”

Applicant respectfully disagrees with the examiner on this point. The examiner has arbitrarily created a rule that would preclude all evaluation methods that involve visual inspection by the human eye. In reality, what is acceptable is based on the standards set by those of ordinary skill in the art, and clearly visual inspection is part of that standard for those skilled in the imaging arts. This point is thoroughly

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discussed in the declaration submitted herewith. Specifically, the submitted declaration explains exactly how the organoleptic test was conducted in the present experiments. Moreover, to further reinforce this point, submitted herewith is an excerpt from a scientific article stating that image evaluation of X-ray photography is ordinarily performed by the organoleptic test (see Radiographic Image Information Science, Chapter 7 Image Evaluation, pp. 74-79, January 31, 1990).

3. Changing the amount of R1 and R2

The examiner has stated that changing the amount of R1 and R2 would change the color tone of the silver image (page 7, lines 4 to 5, Office Action dated July 2, 2008). Applicant respectfully disagrees with the examiner on this point. As clarified in the Declaration submitted herewith, in the past, color tone has been able to be controlled only in the M-G direction by adjusting the size of the developed silver. In contrast, it is found in the present invention that color tone can be unexpectedly controlled in the Y-B direction by a combination of at least one reducing agent represented by formula R1 (a R1 compound) and at least one reducing agent represented by formula R2 (a R2 compound) and which has reducing activity higher by 0.02 or more in terms of logarithmic value (-LogE) of an exposing amount E giving the concentration 1.5 than that of the R1 compound, with the proviso that the R2 compound is contained in an amount of 5% to 40% by mole to a total amount of the R1 compound and the R2 compound according to the present invention.

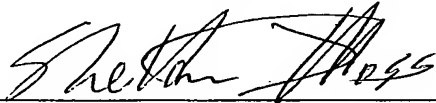
In other words, it is ordinarily known technique that image color tone is controlled by adjusting a silver color tone (color of developed silver). In contrast, the present inventor has found that the R2 compound assumes a yellow color upon oxidation reaction of the R2 compounds per se whereas the R1 compound forms no dye product, and that the image color tone can be controlled by using a combination of the R1 compound and the R2 compound, with the proviso that the R2 compound is contained in an amount of 5% to 40% by mole to a total amount of the R1 compound and the R2 compound, thereby forming a desirable amount of yellow dye (pages 7 and 18 of the present application, and Declarations submitted on April 9, 2008).

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In view of the above amendments, remarks, Declaration and attachment, it is submitted that claims 1, 5, 7, 9, 11, 13 to 19 are in condition for allowance. An early and favorable action is respectfully requested.

Respectfully submitted,



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October 2, 2008